Q1. Write a Program to Print First Name, middle name and last name of employee.

→

```
import java.util.scanner;
Public class Emp
{
   Public static void main (String args[])
   {
     Scanner sc= new Scanner (System.in);
     System.out.Println("Enter first name:- ");
     String fN = sc.nextLine();
     System.out.Println("Enter middle name:- ");
     String mN= sc.nextLine();
     System.out.Println("Enter Last name:-");
     String lN = sc.nextLine();
     System.out.Println("Employee Name:-");
     System.out.Println("first name:-"+fN);
     System.out.Println("middle name:-"+mN);
     System.out.Println("Last name:-"+lN);
   }
}
```

output :-

> javac Emp.java

> java Emp

Enter first name :- Ramesh

Enter middle name :- Arun

Enter Last name :- Malhotra

Q2. Write a Program which find sum of even numbers numbers from 1 to 20.

→

```
Public class Sum
  {
    Public static void main (String [] args)
    {
      int a=0 , b=0 ;
      for (int i=1; i<=20 ; i++)
      {
        if (i % 2 ==0)
        {
          a++;
        }
        else
        {
          b++;
        }
      }
    System.out.Println("Sum of even numbers from 1 to
    System.out.Println("Sum of odd even numbers from 1 to
```

output :-

> javac Sum.java

> java Sum

Sum of even numbers from 1 to 20 : 110

sum of odd numbers from 1 to 20 : 100

---

rite a program which prints first n numbers.

```
import java.util.*;
Public static class Fnum
 {
    Public static void main (String args [])
    {
      Scanner sc = new Scanner (System.in);
      System.out.print ("Enter a number 'n' to print first n
                                numbers :- ");
      int n = sc.nextInt();
      System.out.println ("first " +n+ " numbers are :-");
       for(int i = 1; i<=n ; i++)
         {
           System.out.println (i);
         }
    }
 }
```

utput :-

>javac Fnum.java

>java Fnum

Enter a number 'n' to print first n numbers :- 5

first 5 numbers are :-

1
2
3
4
5

Q4. Write a Program which find sum of first 'n' numbers

```
import java.util.*;
Public class Snum
{
    Public static void main (String args [])
    {
        Scanner sc= new Scanner (System.in);
        System.out.print("Enter a number 'n' to find the
                          first n numbers");
        int n= sc.nextInt();
        int sum= (n*(n+1))/2;
        System.out.println("Sum of the first "+n+" numbers
                          : "+sum);
    }
}
```

output:

```
> javac Snum.java
> java Snum
Enter a number 'n' to find the sum of first n numbers:
Sum of the first 5 numbers is: 15.
```

Q.5 Write a Program which prints factors of entered number.

```
→ import java.util.Scanner;
  Public class fact
  {
      public static void main (String args [])
      {
          Scanner sc= new Scanner (System.in);
          System.out.println("Enter a number to find its
          int n= sc.nextInt();
          System.out.println("Factors of "+n+" are:");
```

```
for (int i = 1; i <= n ; i++)
 {
   if (n%i == 0)
   {
     System.out.println(i);
   }
 }
```

output:-

```
>javac fact.java;
>java fact
Enter a number to find its factors:- 4
Factors of 4:-
1
2
4
```

---

rite a Program which check entered number is Perfect or
ot.

```
import java.util.Scanner;
Public class PerNum
 {
   Public Public static void main(String args[])
   {
     Scanner sc = new Scanner(System.in);
     System.out.println("Enter Number:");
     int n = sc.nextInt();
     int sum=0;
     for (int i=1; i<=n/2; i++)
```

```
{
    if (n%. i==0)
    {
        sum += i;
    }
}
if (sum==n)
    {
        System.out.println(n+" is a Perfect Number.");
    }
else
    {
    System.out.println(n+" is a not Perfect Number.");
    }
}
}
```

output:

```
> javac PerNum.java
> java PerNum
Enter Number:
6
6 is a Perfect Number.
```

---

a7. Write a Program which find Sum of digits (digits entered number.

->

```
import java.util.scanner;
Public class Sod
    {
        Public static void main (String args[])
        {
            Scanner sc = new Scanner (System.in);
            System.out.println("Enter Number:");
```

```
int n= sc.nextInt();
int t = n;
int sum=0;
while (n!=0)
  {
    sum+=n%10;
     n/=10;
  }
System.out.println("The sum of the digits of "+t+" is:"
                                    +sum);
}
```

output:-

```
>javac Sod.java
>java Sod
Enter Number: 678
The sum of the digits of 678 is: 21
```

---

rite a Program which check entered number is Armstrong r not.

```
import java.util.Scanner;
Public class ArmNum
  {
    Public static void main(String [] args)
    {
      Scanner sc= new Scanner(System.in);
      System.out.println("Enter Number:");
       int n=sc.nextInt();
        int on=n;
        int sum=0;
        int d=0;
        int dc=0;
        int t=n;
```

```
while (t!=0)
 {
    t/=10;
    dc++;
 }
while (n!=0)
 {
   d=n%10;
   Sum+=Math.pow(d,dc);
   n/=10;
 }
if (sum==on)
 {
  System.out.println(on+" is an Armstrong
 }
else
{
System.out.println(" on+" is an Not Armstrong
}
}
}
```

output:-

```
>javac ArmNum.java
>java ArmNum
Enter Number:
153
153 is an Armstrong Number.
```

hite a Program which reverse the entered number.

```
mort java.util.Scanner;
ublic class RevNum
  {
    public static void main (String [] args)
     {
        Scanner sc = new Scanner (System.in);
        System.out.println ("Enter Number ");
        int n = sc.nextInt ();
         int rev = 0;
         int d=0;
         while (n!=0)
          {
             d = n%10;
             rev = rev *10 +d;
             n/=10;
          }
         System.out.println ("The reversed number is:" +rev);
     }
}
```

output:

```
> javac RevNum.java
> java RevNum
Enter Number : 1213
  The reversed number is 3121
```

9.10. Write a program which check entered number is Palindrome not.

```
import java.util.*;
Public class Palindrom
{
   Public static void main (String [] args)
   {
      Scanner sc = new Scanner (System.in);
      System.out.println("Enter Number");
      int n = sc.nextInt();
      int on = n;
      int rev = 0;
      int d = 0;
      while (n!=0)
      {
        d = n%10;
        rev = rev * 10 + d;
        n/=10;
      }
      if (on == rev)
      {
       System.out.println (on + " is an Palindrom
      }
      else
      {
     System.out.println (on + " is annot Palindrome
      }
   }
}
```

output:

```
>javac PalinNum.java
>java PalinNum
Enter number : 121
121 is an Palindrome number
```

Write a program which find face value of entered number.

```
import java.util.Scanner;
Public class Faceval
{
    Public static void main (String [] args)
    {
      Scanner sc=new Scanner (System.in);
      System.out.println ("Enter Number");
       int n= sc.nextInt();
       System.out.println(" The face values of the digits are:");
       int d=0;
       while (n!=0)
       {
          d=n%10;
          System.out.println("Face value of digit:"+d);
          n/=10;
       }
    }
}
```

output :-

```
>javac facevalue.java
>java facevalue
Enter Number: 1034
The face values of the digits are:-
face value of digit : 4
face value of digit : 3
face value of digit : 0
face value of digit : 1
```

Q15. Write a program which check entered number is Pri not

→

```
import java.util.Scanner;
Public class PrimeNum
{
  Public static void main (String args[])
  {
    Scanner sc=new Scanner (System.in);
    System.out.println ("Enter Number");
    int n=sc.nextInt();
    if (n<=1)
    {
      System.out.println (n+" is not a Prime
    }
    else
    {
      int d=0;
      for (int i=2; i<=Math.sqrt (n); i++)
```

```
    {
      if (n%i==0)
        {
          d=i;
          break;
        }
    }
      if (d==0)
      {
        System.out.println(n+" is a Prime Number");
      }
      else
      {
        System.out.println(n+" is a not Primenumber");
      }
}
```

Output:-

```
> javac PrimeNum.java
> java PrimeNum
Enter Number:- 7
7 is prime Number.
```

Q.13 Write a program which finds factorial of an entered

→
```
import java.util.Scanner;
Public class factorial
  {
   Public static void main (String args[])
   {
    Scanner sc= new Scanner (System.in);
    System.out.println("Enter Number ");
     int n=sc.nextInt();
      if (n<0)
       {
        System.out.println("Factorial is not defined for neg
                                    numbers.");
       }
      else
       {
        int result = 1;
        for (int i=1; i<=n; i++)
          {
            result *=1;
          }
        System.out.println("The factorial of "+n+" is
       }
  }
}
```

Output:> javac factorial.java.
> java Factorial
Enter Number:- 4
The factorial of 4 is: 24.

Write a Program which prints Fibonacci series up to 'n' numbers.

```
rt java.util.Scanner;
olic class fibo
{
  Public static void main (String [] args)
  {
    Scanner sc=new Scanner (System.in);
    System.out.println("Enter Number");
    int n= sc.nextInt();
     int a=0; b=1;
     if (n<=0)
     {
      System.out.println("Please enter a Positive integer
                          greter than 0");
     }
     System.out.print("Fibonacci series: ");
     for(int i=1; i<=n; i++)
     {
      System.out.print(a+" ");
       int next= a+b;
       a=b;
       b=next;
     }
     System.out.println();
}
```

output:-

```
>javac fibo.java
>javer fibo
Enter Number:-10
fibonacci Series: 0 1 1 2 3 5 8 13 21 34
```

Q.15. Write a program to check entered number is strong

→

```
import java.util.Scanner;
Public class StrongNum
{
  Public static void main (string [] args)
  {
    Scanner sc = new Scanner (System.in);
    System.out.println ("Enter Number:");
    int n = sc.nextInt();
    int on = n, sum=0, d=0, result=1;
    while (n!=0)
    {
      d = n % 10;
      result = 1;
      for (int i=1; i<=d; i++)
      {
        result *= i;
      }
      Sum += result;
      n /= 10;
    }
    if (sum == on)
    {
      System.out.println ("on" is a Strong number!");
    }
  else
  {
  System.out.println ("on" is a not Strong number");
  }
```

4.

```
javac StrongNum.java
java StrongNum
Enter number :- 145
145 is a strong Number
```

---

rite a Program to find all Armstrong numbers from 1 to 1000.

```
blic class Armok
 {
  Public static void main (String [] args)
     {
      System.out.println ("Armstrong numbers between 1 and
       1000 are :");
      for (int n=1; n<=1000; n++)
       {
        int on=n, sum=0, dc=0, t=n, d;
        while (t!=0)
         {
          t-/=10;
          dc++;
         }
        t=n;
        while (t!=0)
         {
          d= t%10;
          sum+=Math.Pow(d, dc);
          t/=10;
         }
        if (sum==on)
```

```
            {
             System.out.print (" " + on);
            }
        }
    }
}
```

output

```
>javac ArmOK.java.
>java ArmOK.
```

Armstrong numbers between 1 and 1000 are :-

1 2 3 4 5 6 7 8 9 153 370 371 407

Q.17. Write a program to find all Prime numbers from 1 to

→

```
Public class PrimeOk
  {
    Public static void main (String args [])
     {
      System.out.println ("Prime numbers between 1 and
      for (int n=2; n<=1000; n++)
      {
       int c=0;
       for (int i=2; i<=Math.sqrt (n); i++)
        {
         if (n%i==0)
          {
           c++;
           break;
          }
        }
       if (c==0)
```

```
{
  System.out.print(n+" ");
}
}
```

```
>javc Primeok.java
>java Primeok
```

```
3 5 7 11 13 17 19 23 29 31 37 41 43
53 59 61 67 71 73 79 83 89 97 101 103
107 109 113 127 131 137 139 149 151
163 167 173 179 181 191 193 197 199
223 227 229 233 239 241 251 257 26
271 277 281 283 293 307 311 313 317
37 347 349 353 359 367 373 379 383 389
401 409 419 421 431 433 439 443 449 4
463 467 479 487 491 499 503 509 521 52
7 563 569 571 577 587 593 599 601 607
7 619 631 641 643 647 653 659 661 673 677
91 701 709 719 727
```

Q18: Write a Program to find all palindrome numbers from

-> Public class Palick

```
{
  Public static void main (String args[])
  {
    System.out.println ("Palindrome numbers from 500 to 70
    for (int n=500; n<=700; n++)
    {
      int on=n, rev=0, d=0;
      while (on!0)
      {
        d=on%10;
        rev = rev * 10+d;
        on /=10;
      }
      if (n==rev)
      {
        System.out.print (n+" ");
      }
    }
  }
}
```

output: > javac Palick.java

> java Palick

Palindrome numbers from 500 to 700 are: 505 515 5
545 555 565 575 585 595 606 616 626 636 646
676 686 696.

rite a program which prints series like 51, 53, 55, ... 99.

```
blic class oddseries
{
  Public static void main (String [] args)
  {
    System.out.println("The series from 51 to 99 is: ");
    for (int n = 51; n <= 99; n+=2)
    {
      System.out.print(n+" ");
    }
  }
```

> javac Oddseries.java.

java Oddseries.

The series from 51 to 99 is:

51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99.

Write a program which prints series like A B C Z.

```
blic class Alphaseries
  Public static void main (String [] args).
  {
    System.out.println("The series from A to Z is: ");
    for (char ch = 'A'; ch <= 'Z'; ch++)
    {
      System.out.print(ch+" ");
    }
  }
```

Name of the Programme - Practical Assignment - II - Java.

Q.1. Write a Program to find addition, Subtraction, multiplication, division of two numbers.

→
```
import java.util.Scanner;
Public class Arithm
{
  Public static void main (String args[])
  {
    Scanner sc = new Scanner(System.in);
    System.out.Println("Enter 1st number");
    int a=sc.nextInt();
    System.out.println("Enter 2nd number");
    int b=sc.nextInt();
    int add=a+b;
    int sub=a-b;
    int multi=a*b;
    int div=0;
    if (b!=0)
    {
      div=a/b;
    }
    else
  {
  System.out.println("Division by zero is not allowed.");
```

```
System.out.println("Divi Results:");
System.out.println("Addition:"+add);
System.out.println("Subtraction:"+sub);
System.out.println("Multiplication:"+multi);
if(bi=0)
  {
    System.out.println("Division:"+div);
  }
}
```

utput:

```
>javac Arith.java
>java Arith
Enter 1st Number:- 10
Enter 2nd Number: 5
Results.
Addition: 15
Subtraction: 5
Multiplication: 50
Division: 2
```

te a program to find average of five numbers

```
rt. java. util. Scanner;
lic class Avg five
{
  Public Static void main (String [] args)
   {
     Scanner sc = new Scanner (System. in);
     System. out. println ("Enter five Numbers");
      int a=sc. nextInt();
      int b=sc. nextInt();
      int c=sc. nextInt();
      int d=sc. nextInt();
      int e=sc. nextInt();
      int sum = a+b+c+d+e;
       int avg = sum/2;
      System. out. println ("The average of the five numbers is:-
                              " +avg);
   }
}
```

Ouput.

```
>javac Avgfive.java
>java Avgfive.
Enter five Numbers:-
2
2
3
4
5
The average of the five numbers is : 8.
```

Q.3. Write a program to find area of circle.

→
```
import java.util.Scanner;
Public class Aoc
{
    Public static void main (String args [])
    {
        Scanner sc = new Scanner(System.in);
        System.out.println ("Enter the radius of the
        int r = sc.nextInt();
        double area = Math.PI * r * r;
        System.out.println ("The area of the circle
                                area);
    }
}
```

output:-
```
javac Aoc.java
java Aoc
Enter the radius of the circle: 3
The area of the circle is: 28.27433882 3
```

Q.4. Write a program to find circumference (Perimeter) of circle.

→
```
import java.util.Scanner;
Public class Crc
{
    Public static void main (String args[])
    {
        Scanner sc = new Scanner (System.in);
        System.out.println ("Enter the radius of the circle:
        int r = sc.nextInt();
        double crc = 2 * Math.PI * r;
```